

(57) Abstract: In an optical add/drop amplification device (1) arranged between fibre spans (2, 3) in an optical telecommunications system, comprising a first input amplifier (4), a channel add/drop device (7) and an output amplifier (8) connected in a series path, the input amplifier (4) is arranged to produce substantially constant output power, such that the output power of amplified spontaneous emission (ASE) noise compensates in use for loss of signal power in the event of breakage of a fibre span, to ensure survival of any channels added at the add/drop device. In accordance with the invention, an additional input amplifier (9) is provided to produce the compensating ASE noise in the event of failure of the first input amplifier.

